

REMARKS

With the entry of the foregoing amendments, claims 8-16, 26, 27 and 34-47 remain in this application. Applicant respectfully requests favorable consideration of all of these claims.

At the outset, Applicant requests the removal of the "finality" of the Office Action because the Office Action does not acknowledge or address claims 38-47 presented in Applicant's Amendment of December 8, 2004. Instead, the entire Office Action only addresses claims 8-16, 26, 27, and 34-37. In this regard, the Office Action's specific objections and rejections refer back to prior Office Actions – none of which addressed the new claims 38-47 presented in Applicant's Amendment of December 8. As a result, removal of the "finality" designation is appropriate, and review of claims 38-47 as presented in the Amendment of December 8, is respectfully requested.

On page 2 of the Official Action, an objection is again raised to at least pages 10 and 19 of the specification as amended in the Amendment of January 6, 2003, because of the typographical correction concerning "sodium metabisulfite." Support for this typographical correction is found in the originally filed application. For example, the Examiner's attention is directed to the detailed list of the components for this invention on page 6, line 5 to page 18, line 2, which specifically includes – in the original disclosure – the now objected to language that Applicant is dutifully attempting to correct in other parts of the specification. In this regard, the Examiner will note that this detailed listing of components for this invention does not include the typographically incorrect material that the Applicant is attempting to correct by its Amendment. One skilled in the art would readily appreciate this typographical change that is not new matter.

Furthermore, page 16, line 3 of the specification provides even more support for the typographical correction. This portion of the specification references the use of the detailed list

of components in the "foregoing examples" in the application. Moreover, page 17, line 10 of the specification, specifically refers to Applicant's proposed language at two different places – which provides clear support for the typographical correction – especially when reading and understanding the specification as a whole.

Finally, it is significant to note that all of the foreign Patent Offices, including the EPO, have accepted the Applicant's typographical correction without any "new matter" objections. Again, one skilled in the art can readily appreciate the typographical correction, and the foreign Patent Offices have confirmed the propriety of the correction. It would be a draconian result for the USPTO to rely on alleged form over substance to continue this objection, and would result in the USPTO incorrectly refusing to look to the specification as a whole and the portions of the specification identified above – all of which support the typographical correction.

At the bottom of page 2 of the Office Action, claims 14, 27, 36 and 37 stand rejected under 35 U.S.C 112, first paragraph, as allegedly failing to comply with the written description requirement. Like the specification objection above, these claims are rejected because of alleged new matter concerning the phrase "sodium metabisulfite." Applicant respectfully requests the withdrawal of this rejection, like the specification objection above, based on the facts and positions set forth in the three preceding paragraphs. As the examiner can appreciate, one skilled in the art, when reading the entire disclosure and being familiar with catalyst chemistry, would understand that the phrase sodium metabisulfite is the proper catalyst disclosed and claimed in this application.

On page 3 of the Office Action, claims 8-16, 26, 27 and 34-37 stand rejected under 35 U.S.C. 102(b) or (e) as allegedly anticipated by or, in the alternative, under 35 U.S.C. 103(a) as allegedly obvious over Horowitz (U.S. Patent 3,401,049) as applied to claims 8-10, 12-16 and

34, Horowitz et al (U.S. Patent 5,232,748) or Sanduja et al (U.S. Patent 6,368,369). Applicant respectfully requests the withdrawal of this rejection for the following reasons.

The subject claims require a coating composition chemically grafted to an oil, fuel, coolant or air filter material that results in increased filtration efficiency. None of the prior art discloses or suggests this claimed invention.

Moreover, Applicant's claims require a specific coating composition, certain ingredients and certain percentages which are not disclosed or suggested by the three cited references, either individually or in any combination. The three cited references do not address or appreciate that the requisite coating composition is suitable and effective in chemically grafting to an oil, fuel, coolant or air filter material and increases its filtration efficiency. In this regard, Applicant confirms that its preamble is a limiting preamble that further distinguishes the claimed invention from the cited art. In addition, the body of the claims confirms that the subject matter in the preamble of its independent claims is a limitation that further distinguishes its invention from the cited prior art (i.e., as confirmed by the wherein phrase at the end of each independent claim).

Turning to the cited prior art, none of those references discloses or suggests the claimed "coating composition chemically grafted to an oil, fuel, coolant or air filter material" and "wherein the coating composition chemically grafted to the oil, fuel, coolant or air filter material increases the filtration efficiency of the material." The cited '049 patent does not disclose or suggest a "coating composition chemically grafted to an oil, fuel, coolant or air filter material" and "wherein the coating composition chemically grafted to the oil, fuel, coolant or air filter material increases the filtration efficiency of the material." Indeed, the '049 patent repeatedly discusses the use of a polymerizable composition (which is different than and does not include all of the necessary ingredients of the Applicant's invention) for use with "cellophane." As the

examiner can appreciate, cellophane can not act as an oil, fuel, coolant or air filter material. It is the antithesis of such a material. Accordingly, the '049 patent does not disclose or suggest the claimed invention.

Moreover, and contrary to the claimed invention that requires a catalyst and a graft initiator in the "coating composition," the '049 composition does not include any graft initiator, provides no suggestion to utilize one in the '049 composition, and provides no suggestion of the Applicant's claimed percentages of its particular ingredients. Instead, the '049 patent discloses and repeatedly teaches that a silver or silver oxide is distributed on the surface of non-metallic substrates such as cellophane before any composition is coated thereon. As specifically taught by the '049 patent, "the resulting object having bodies of silver oxide or metallic silver formed in situ throughout at least the surface layer thereof is then contacted with a polymerizable composition which is or becomes polymerizable in contact with metallic silver or silver oxide ..." See, column 2, lines 1-5. This disclosure and other similar disclosures throughout the specification and claims of the '049 patent confirm that its polymerizable composition does not include each of the ingredients in Applicant's claims. In addition, the '049 patent does not disclose or suggest the percentages of the various ingredients utilized in Applicant's "coating composition."

Similarly, the '748 patent fails to disclose or suggest the claimed invention. In fact, the '748 patent is quite similar to the '049 patent -- including its disclosure and teachings of compositions used with "cellophane." See column 1, line 7. The '748 patent discloses and teaches the use of a "preactivating solution" and a "grafting solution." See, for example, Example I in column 4. As confirmed by the "grafting solution" in Example I of the '748 patent, that solution does not include the Applicant's claimed "coating composition" -- that requires the

use of a graft initiator, certain components in certain percentages, and wherein the coating composition is suitable and effective in chemically grafting to an oil, fuel, coolant or air filter material. In contrast to the claimed invention, the '748 patent teaches one skilled in the art that cellophane is first dipped in a "preactivating solution," is washed in plain water and dried, and is then dipped in a "grafting solution" that does not include all of the ingredients of the Applicant's claimed "coating composition" and does not utilize those components in the claimed weight percentages. Moreover, as noted above, cellophane can not be utilized as an oil, fuel, coolant or air filter material. This confirms the different nature of the invention disclosed and taught in the '748 patent. Accordingly, the '748 patent does not anticipate or render obvious the claimed invention.

The '369 patent also fails to disclose or suggest the claimed invention. The '369 patent is directed to specific liquid hydrocarbon fuel compositions, such as low-sulfur diesel and low-sulfur gasoline fuel compositions. Fuel compositions are not filters. Those '369 compositions require the use of boric acid in a liquid hydrocarbon fuel. These requirements and components are completely unlike the "coating composition chemically grafted to an oil, fuel, coolant or air filter material" and "wherein the coating composition chemically grafted to the oil, fuel, coolant or air filter material increases the filtration efficiency of the material."

Furthermore, the '369 patent discloses and teaches the stabilization of boric acid by forming a reaction product with a chemically grafted liquid hydrocarbon fuel. See, for example, column 3, lines 34-35. As specifically taught by the '369 patent, the boric acid chemically grafted liquid hydrocarbon fuel reaction product is prepared by first adding one or more surfactants to a liquid monomer or prepolymer. See, for example, column 4, lines 36-38. Sufficient surfactants are used so that when the particulate boric acid is added to the

monomer/prepolymer/surfactant mixture, the macro globule particles of the boric acid are broken up and prevented from reforming. See, for example, column 4, lines 43-47. After adding the boric acid, the liquid hydrocarbon fuel is added and the resulting mixture is stirred vigorously until it is homogeneous. See, for example, column 4, lines 53-55. After further additions of other ingredients, a graft initiator is finally added after the fuel has long since been added. See, for example, column 5, lines 17-18. This disclosure of a different process, different ingredients, different amounts and different end product does not disclose or render obvious the claimed invention.

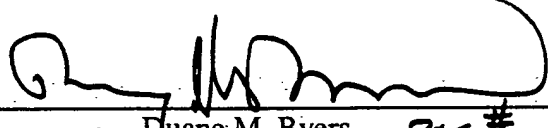
In view of the claimed subject matter and the foregoing remarks, Applicant respectfully requests the withdrawal of the Section 102 and Section 103 rejections.

In closing, Applicant submits that this case is in condition for allowance and earnestly solicits a notice to that effect. If the examiner has any questions concerning this case, the undersigned may be contacted at 703-816-4009.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:


Duane M. Byers
Reg. No. 33,363
R09 # 30251

DMB:lfo
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100